

531. m. 3
8.1

ACCOUNT of the PASSAGE

of

Ship ATLAS, Capt. ALLEN COOPER,

to the

EASTWARD of BANKA,

1785.

Published at the Charge of the East India Company,

from Capt. Cooper's MS.

by

Dalrymple.

L O N D O N,

Printed by GEORGE BIGG, 1789.



2d March 1789.

CAPT. Cooper was possessed of a Pocket Chronometer by Arnold, which in his opinion was without error; for, at his arrival on the Coast of Java from England, by his estimation from Batavia according to M. D'Après' Chart, he was, only 13' different from what his Chronometer indicated; but, as Capt. Huddart found on Capt. Cooper's arrival at Canton, that his Chronometer had a rate of gaining 5'. $\frac{1}{2}$ day, and as Capt. Cooper's inferences in the vicinity of Batavia do not seem to agree together, nor the distances assigned to correspond with the true distances from Batavia, It appears necessary to be very explicit in this part of his Voyage.

On the 25th July, At 5 PM, Capt. Cooper was by Chronometer in Long. $105^{\circ} 6' E$ from Greenwich; The Variation $\frac{1}{2}^{\circ}$ Azimuth $0^{\circ} 17' W$.

From this time to 8 AM he made his Course by the Log NNE good; but the Chronometer shewed that a Current had, in these 15 hours, set them 21'.

A

to

to the *Westward*. At 8 A M, being then in Long. $105^{\circ} 5' E$, they made *Clapps Island*, near the *South Coast* of *JAVA*, bearing from N to NNW 6 leagues distant. From these *Bearings*, on *M. D'Après* Chart, Capt. *Cooper* infers he was $1^{\circ} 33' W$ of *Batavia*, which being in $106^{\circ} 51'$

Chronometer $105. 5. .$ by Chronometer he was $1. 46.$

Error from *England* $52'$ of time, or $0. 13.$

But by my Chart, taken from *M. D'Après* last Publications, *C. Cooper* was then $1^{\circ} 41' W$ from *Batavia*, or only $5'$ to the East of where his Chronometer placed him: so that, so far as this Observation goes, his Chronometer seemed to have gone exactly to *Mean-Time*, during the course of his Voyage from *England*, which he left the 7th April, and although the day when he received the Chronometer is not mentioned, as the time elapsed was above 100 days, the total difference, portioned to the time elapsed, would not give a daily rate that could be ascertained by any Observations at Sea, and therefore his landfall cannot be of any use in ascertaining the then rate of his Chronometer.

The

The following is the Abstract of Capt. Cooper's Chronometer Observations.

1785	Lon. \mathcal{P} Chron.	Longitude from Batavia.	Bearings by which inferred.	Longitude, of Places
	\mathcal{P} Chron.	Differ. \mathcal{P} Chart.		so inferred,
		by Chron.		by Chronometer.
25th July .	105° 5' E	1° 46'	0° 5' W 1° 41'	Clapp's Island 6 leagues { N 105° 5' E NNW 104. 58
26th . . .	104. 54	1. 51	0. 2 W 1. 55	Clapp's Island 4 leagues ESE 105. 5
				Java Head 3 leagues NW 104. 48
31st . . .	105. 40	1. 11	0. 16 W 0. 55	Ext. Java { SWbS SbE $\frac{1}{2}$ E off shoar 4 lea ^s .
				Great Cap 4 leagues SWbW 105. 31
1st August .	105. 45	1. 6	0. 19 W 0. 47	West Island 2 leagues ENE $\frac{1}{2}$ N 105. 50. 20"
				High Land Bantam 6 $\frac{1}{2}$ lea ^s . SSW
2d \rightarrow . . .	105. 56	0. 55	0. 6 W 0. 49	West Island . . . S 40° E
				S ^o Brother . . . NW
				N ^o Brother . . . N 42° W
				North Watcher . . . E 24. N
3d . . .	105. 49	1. 2	0. 21 W 0. 41	North Watcher . 4' East 105. 53.

So that there is no uniformity in the going of the Chronometer during these 9 days; or the Positions are not well assigned, and consequently no precise inference can be made, by a comparison with *Batavia*: Taking the first and last days, the Chronometer appears to have lost 16' or 72^s in 9 days, i. e. 8^s \mathcal{P} day: comparing the first day with the last but one, the loss was only 4^s in

in 8 days, or half a second ~~per~~ day. But Capt Huddart found that Capt. Cooper's Chronometer had a rate of 5' ~~per~~ day gaining on his arrival at Canton: The Correction, of Capt. Cooper's Longitudes, by this Rate will be as follows.

						Chronom.	W. of Chart
25th July,	105° 5' E Long. by Chronometer.	By Chart	105° 10' E	0° 5' 3"			
26th .	104. 54. 1 day at 5' gain = $1\frac{1}{4}$.	or 104° 52.45.	104. 56. .	0. 3.45			
31st .	105. 40. 5	$6\frac{1}{4}$.	105. 33.45.	105. 56. .	0. 22. 15		
1st Aug.	105. 45. 1	$1\frac{1}{4}$.	105. 43.45.	106. 4. .	0. 20. 15		
2d .	105. 56. 1	$1\frac{1}{4}$.	105. 54.45.	106. 2. .	0. 7. 15		
3d .	105. 49. 1	$1\frac{1}{4}$.	105. 47.45.	106. 10. .	0. 12. 15		

so that Capt. Cooper's Observations, by Chronometer, do not give, with competent precision, the Longitudes in this quarter: if no mistake has been made in working the Observations, or in allowing for the Equation, which Error, if any, cannot be traced, as Capt. Cooper, unluckily, has not preserved the work.

I cannot conclude without making my acknowledgements to Capt. Cooper, for his obliging attention to me in communicating his Observations.

Dalrymple.

Ship

1785.
Sunday, July 24.

Ship ATLAS, Capt. Allen Cooper, from LONDON
towards CHINA.

Courfe.	Dist.	D.L.	Dep.	Latitude.	D.Lon.	Lon. A.	Lon. Chron.
N 6° E	147'	146'	15'	8° 28' S	8° 40' S	15° E	107° 13' E
							104° 51'

at Noon.

Monday, July 25.

H.	Weather.	Winds.	Courfe.	K. F.	Soundings.
1, 3	Cloudy	EbS	NNE½E	18.6	
4		East	NNE	6.6	
5			NNE½E	6.6	{ Var. 40° Az. . . 0° 17' W Long. 40° Chron. 105° 6' E
6				6.6	
7, 8			NEbN	10.0	
9, 10	L ^s to NW	ESE.	NE	9.6	
11, 12			NE½N	10.4	
1			NNE½E	4.4	
2				2.0	
	Hard Rain.	Hove to.			
3		Up	NE Off NbW	...	
4			Up NE	...	No Ground 90 fms
5			Off NNE	...	
6	Made Sail.			...	
7			NNE	4.4	
8			N½W	4.0	{ Saw Land from Mast-head Long. 40° Chron. 105° 5' E
9, 10				4.6	
11, 12			NNE	4.0	
				92'	

Light Winds and cloudy Weather.

At 8 AM,

Saw the Land, being Claps Island, bearing from N° to NNW
about 6 leagues distant

B

The

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July 25.

At Noon,

Body of <i>Claps Island</i>	NW 5 leagues
<i>Trovers Island</i>	NE $\frac{1}{2}$ N
High Land on <i>Java</i>	NbW $\frac{1}{2}$ W 8 leagues
Long. $\frac{3}{4}$ Chron. at 8 AM	. . . . .	105° 5'
Last Obs. $\frac{1}{2}$ *	. . . . .	105° 40'

Diff. 35 Miles

The Land we first saw at 8 AM, was

Claps Island bearing NNW 6 leagues

From these Bearings I correct my Watch as follows :

Long. $\frac{3}{4}$ Chronometer	. . . . .	105° 5'
Long. of <i>Batavia</i>	. . . . .	106° 51'
Diff. from <i>Batavia</i> by Chronometer	. . . . .	1. 46.
True dist. as measured from <i>M. D'Apré's Chart</i>	. . . . .	1. 33.
To the Westward of true Long. of the Ship's situation when she made Land	. . . . .	0. 13.

Long. at 8 AM 105° 5'
13.

True Long. of the Ship, *Claps Island* bearing NNW to N 105° 18.

Courfe.	Dist.	D.Lat.	Dep.	Latitude.	D.Lon.	Lon. A.
				A. O.		
N 16° E.	90'	86°	26'	7° 14' S 7° 10'	26'	107° 39'

I must observe that there is more danger of a Ship's falling to leeward of *Java Head*, than is generally thought. I crossed the Tropick, by very good Observations, in 103° E, and after that time, could scarcely ever lay up better than NbE, and should certainly have fallen to
Leeward,

1785.
July 25.

Leeward, had not the Trade favoured me a little, in the Lat. of 8° and 9° and the Ship holding a very good wind. I think no Ship should depend on the SE Trade, as it is called here, to make any *Easting*, as the wind hangs chiefly at NbE and NNE, * blowing very fresh and raising a large Sea.

The *South*, *East* and *West* sides of the Island of *Trovers* (which were the only parts of it I saw) have a dangerous *Reef* of *Rocks* extending from off them, at least a mile, on which the Sea *breaks* very high; and to be *heard*, two leagues at Sea. The *Island* is entirely covered with wood, and is about $2\frac{1}{2}$ leagues in extent from East to West.

Claps Island, I should also think, as well as the other, dangerous to approach; as it appears to have a very *rocky Coast*. I found the *Tide*, or Current, set in very strong, towards the shoars of *both* these *Islands*.

Wednesday,

* Obviously a mistake of the Pen, it means The Wind hangs so far Easterly that You cannot make a more *Easterly Course* than NbE and NNE. D

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1785.
Tuesday, July 26.

H. Weather. Winds. Course. K. F. Soundings.

1 Fair . . . SWbW NW $\frac{1}{2}$ W 2.6

2 3.0

TK^d to the Southward

3 SW . SSE 2.0

4, 5 SWbS. SEbE. 2.0

6 TK^d SW $\left\{ \begin{array}{l} 1.0 \\ 1.0 \end{array} \right.$

7 Th.&Light^d. SSE . SW $\frac{1}{2}$ W 12.4

9, 10 SW 12.0

11 Taken aback N^o . West 2.4

12 Hard Rain 2.0

1, 4 Variable NWbN 14.0

5, 6 ESE . WNW 9.4

7, 8 NWbW 9.0 Long. 79^o Chron. 104^o 54^o E

9 4.4

10 WNW 3.4

11 4.0

12 4.0

Dist. 89 Miles

At 2 PM,

Body of Claps Island WbN $\frac{1}{2}$ N

East Point of Trovers Island NEbE

High Land of Java NWbN

At 4 PM,

Body of Claps Island WNW

High Land of Java NW

Extreams of Trovers Island NNW to NbE $\frac{1}{2}$ E 3 lea^s

At $\frac{1}{2}$ past 5 PM,

Extream Points of Trovers N 26^oW to N 55^oW

Body of Trovers NW 7'

Claps Island W $\frac{1}{2}$ S 5 leagues

At

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July 26.

At Sunrise,
Java Head NW $\frac{1}{2}$ W 6 leagues

At 8 AM, Long. \mathcal{H} Chron. $104^{\circ} 54'$ E.

Java Head NW 3 leagues
Claps Island ESE 4 leagues

At 10,

Java Head NNW 4'

At $\frac{1}{2}$ past 10,

Princes Island NbW $\frac{1}{2}$ leagues

At Noon, Lat. O. $6^{\circ} 49'$ S.

Java Head SSE 9'
Friar N $\frac{1}{2}$ W 4'
Peak on Prince's Island NbE

I shall correct my Chronometer from the bearings of the *Extream Point* of Java to the Southward, and *Claps Island*, allowing myself at that time to be 12 miles to the *Eastward* of Java Head.

Long. \mathcal{H} Chronometer at 8 AM $104^{\circ} 54'$
Long. Batavia $106^{\circ} 51'$

Dist. from Batavia \mathcal{H} Chronometer 1. 57.

True Dist. \mathcal{H} D'Apres Chart. 1. 45.

Difference to be added to Lon. \mathcal{H} Chronometer 12.

This Error of the Chronometer gives the Longitude to the Westward of the Ships true situation, therefore 12 miles must be added to correct the Chronometer.

C

Wednesday,

1785.
Wednesday, July 27.

H.	Weather.	Winds.	Courfe.	K. F.	Soundings.
1, 2	Fair.	SE.	NEbE	11..	
3, 4				12..	
5, 6				13.6	
7			ENE.	5.1	25 fath mudi
8			NEbE	1.6	
9				5..	25
10			NNE	4..	22, 21, 18, 18
11				4..	18, 18, 17, 16
12				1..	16 to 22
1			Up E off EbN	...	16, 22
2				...	18, 17
3			EIN of NEbE	...	17, 20
4				...	20, 20
5			East off NE	...	20, 20
6	Made fail			...	20, 20
7			NE	1..	20½, 19½
8				1..	22, 19
9				1..	
10, 12			NEbN	5..	
				70.	

I shall correct my Chronometer from the bearings
At 2 law a Ship in Mew Bay, showed Portuguese
Colours.

At 4 PM,

2^d Point SSE 3'
Peak on Princes Island NWbW 3 leagues

At 6 set,

3^d Point EbN 5'
N^o End of Princes Island WSW

At 8 PM,

3^d Point SbE 3'

At 10 rise,

Extreams of Java SSE to NE off shoar 3'
Peak on Crocatao WbN½N

At

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At 8 AM,

Tbwart-the-Way Isle

NbE½E

The *Coast* of *Java* after passing the 3^d Point is very high, inland.

There is very good Anchorage along this part of the *Coast*, in 20 fms stiff mud.

A strong *Current*, apparently running to the SW, which I observed by its passing the *Fishing Pots* so rapidly.

Thursday, 28.

H. Weather. Winds. Courfe. K. F. Soundings.

1, 2 Cloudy Variable NEbN 3... 20 fms.
3, 4. 2... 20
7 Came to ⚓ with the B. B. in 8 fms black sand

At 4 PM,

Anger Point

NE 5.

Extream of Java to the Southward

SbW off shoar 9.

Little Cap.

NEbN

Great Cap.

NbE½E

At 7 PM,

Lacona Point

NEbE 2.

There are *Breakers* a mile off the *Fourth Point* of *Java*, and from that to *Anjere*, the *Soundings* are irregular and deep, but if you luff in shoar you find regular *Soundings* from 9 and 10 to 8 and 5 fathoms, and within that, close to the shoar, 6 fathoms.

AM, Sent the Cutter ashoar for water; received four *Puncheons* by the Dutch Boat, also received *forty Turtle* and other refreshments.

Mostly calm with sultry Weather.

Lat. O. 6° 9' S.

Friday,

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1785.
Friday, July 29.

H. Weather. Winds. Course.

2 . Fair . Calm
4 Weighed

5 Came to \rightarrow in 15 fathoms water abreast
the 1st Dutch Flag Staff.

10 Came on board the Cutter and Yawl with water

7 Tried the Current and found it set WSW 2 Miles

7 Hove up the Bower and let go the Kedge \rightarrow

10 Light Airs WSW. Weighed

12 Came to \rightarrow
Mostly Calm

At 11 AM,

St. Nicholas Point	NEIN
Little Cap	NEIE 2' dist.
Anjere Town	SEBE

12 AM at \rightarrow Bearings as under,

Great Cap	NBE
Little Cap	NEbN
Thwart-the-way Isle, N ^o Point	NNW $\frac{1}{2}$ W
Anjere Town	SSEIE 2' dist.

Finding the Portuguese had a Pilot on board, which
had been several Voyages through the Strait of Gaspar,
I determined to follow him through them.

In Company the Portuguese.

AM sent the Cutter ahead for water; received four
Punchons by the Dutch Boat, also received forty Pintle
and other refreshments.

Mostly calm with sultry Weather.
Lat. O. 6. 9. S.
Friday,

1785.
Saturday, July 30.

H.	Weather.	Winds.	Course.	Soundings.
1, 5	.	.	.	Calm.
8	Light Airs	NE		
9, 2	.	.	.	Calm.
5	Light Airs	SSE.	Weighted	
7	.	.	.	NE to E 25 to 20 fms.
8	.	.	.	31
9	.	.	.	23 26 23
10	$\frac{1}{2}$ past came to \rightarrow in 32 fms.			

At 6 AM,
Abreast the *Little Cap*

At 8,

<i>Great Cap</i>	.	.	.	.	NW $\frac{1}{2}$ W
<i>Little Cap</i>	.	.	.	.	SbW $\frac{1}{2}$ W

At $\frac{1}{2}$ past 9 AM,

Extream Point of Java	.	.	.	.	E $\frac{1}{2}$ N
<i>Great Cap</i>	.	.	.	.	W $\frac{1}{2}$ S

 About midway dist. 2 miles.

When \rightarrow at Noon. Lat. O. $5^{\circ} 53' S$.

<i>Great Cap</i>	.	.	.	.	WSW $1\frac{1}{2}$ miles
Extream of Java	.	.	.	.	EbN
<i>Little Cap</i>	.	.	.	.	SbW
St. Nicholas Point	.	.	.	.	SEbS

 Dist. off Java 4 miles

In the Afternoon went on shoar, accompanied by Mr. Bartlett and Mr. Daniel, upon the *Great Cap*, found it entirely covered with Trees and Evergreens. Row'd round the Island, it was steep in all its parts,
 D and

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July 30.

and rocky, except on the NE shoar, where was a small sandy Beach.

The Tide runs so strong to the SW part of this Island, that we could not stem it with good Breeze in a six-oared Cutter, we left the Island at 6 PM, and did not reach the Ship till 2 AM. The Tide to the SW runs rapidly for 14 hours, then takes its Course immediately to the NW, but runs with much less force.

Sunday, July 31.

H.	Weather.	Winds.	Course.	Soundings.
1, 12, 1	Fair .	NE		
2, 4	Cloudy	Weighed		
5, 6	. . . . .	ENE	50 to 45	Saw a Ship at \rightarrow off Bantam P.
7	. . . . .		33, 35	
8	. . . . .	NEbE		Spoke a China Junk bound to Batavia
9	. . . . .		34 to 35	shells
10	. . . . .		35, 34, 34	
11	. . . . .		35, 35	Clay
12	. . . . .		35, 33	D ^o and Shells

At Sunrise,

Bantam Point	SEbE $\frac{1}{2}$ E
Extream to the Westward	SSW $\frac{1}{2}$ W
Great Cap	SW $\frac{1}{2}$ W

At 8 AM, Long. $\frac{3}{4}$ Chronometer 105° 51' East. ^a

Extreams of Java SbE $\frac{1}{2}$ E to SWbS
Off shoar about 4 leagues.

Great Cap SW $\frac{1}{2}$ W 4 leagues

At

^a This is the Longitude $\frac{3}{4}$ Chronometer corrected; but he afterwards makes it 105° 52' E. *D*

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July 31.

At 9 AM,

Pulo Baby SE $\frac{1}{2}$ S to SbE

At Noon Lat. O. $5^{\circ} 37'$ South.

Pulo Baby SE to SE $\frac{1}{2}$ S 3 or 4 leagues

Bantam Point SSW

St Nicholas Point SW

High Land of *Bantam* SSW 5 Miles

From the following Bearings I again correct the Watch.

Pulo Baby SE $\frac{1}{2}$ S to SbE

Great Cap SW $\frac{1}{2}$ W

Longitude $\frac{7}{8}$ Chronometer at 8 AM $105^{\circ} 40'$

Longitude of *Batavia* $106^{\circ} 51'$

Difference 1. 11.

True distance by the above Bearings to *Batavia* 0. 59.

To be added to Chronometer 12 Miles

Longitude $\frac{7}{8}$ Chronometer at 8 AM $105^{\circ} 40'$

Error + 12.

True Longitude, Ship $105^{\circ} 52'$

Monday,

So in Original. *A*

1785.
Monday, August 1.

H.	Weather.	Winds.	Course.	K.F.	Soundings.
1, 2	Cloudy	NNW	NE	3.0	
3				1.4	36 to 30
4				1.4	29, 34
5	Came to \rightarrow with the Kedge in 30 fathoms				
7	Tryed the Current found it set to the Southward $1\frac{1}{2}$ mile $\frac{7}{8}$ hour				
12	D ^o		WSW	1 Miles to $1\frac{1}{2}$	
5	Weighed and made Sail				
6		Eaft.	NNE $\frac{1}{2}$ E	2.0	20 blue Mud
7			NNE	1.7	28 to 24
8			N ^o	1.0	24, 22
9				1.0	22, 21
10				1.0	20, 19, 20
11				2.4	19
12			NE	1.4	19

Diff. 17 Miles

At 4 PM,

Northernmost Point of *Pulo Baby* SEIS

5 PM At \rightarrow , Bearings,

Pulo Baby SEbe to SE $\frac{1}{2}$ E
Island-Estem or West Island NEbe

At $\frac{1}{2}$ past 6 AM,

Center of *Pulo Baby* S 19° E
Estem E 35° N

At 8 AM,

Body of *West Island* ENE $\frac{1}{2}$ N 2 leagues
Bantam Point SbW
High Land of *Bantam* SSW 6 $\frac{1}{2}$ leagues
Extr. of *Java* to the Westward SWbS

At

1785.
Aug. 1.

At 10 AM,

West Isle E $\frac{1}{2}$ N 10 miles

At Noon, Lat. O. $5^{\circ} 20' S$.

West Isle E $28^{\circ} S$

Brothers NNW $\frac{1}{4}$ W

Light Airs and fultry Weather throughout.

I correct the Chronometer from the following Bearings.

West Island ENE $\frac{1}{4}$ N

Bantam Pt. SbW

High Land about Bantam SSW

Extream to the Westward SWbS

Long. $\frac{3}{4}$ Chron. at 8 AM $105^{\circ} 45'$

Long. of Batavia $106. 51$

Dist. from Batavia $\frac{3}{4}$ Chron. 1. 6

True dist. from Batavia 54

To be added to the Chron. 0 12

Therefore Long. of Ship at these Bearings $105. 45$

Error 12

True Long. $105. 57$

E Tuesday,

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1785.
Tuesday, Aug. 2.

H.	Weather.	Winds.	Course.	K. F.	Soundings.
1	S.	NE	1.2	Driving 1 P ^r to the N ^o	
2			1.0	Driving 2 P ^u	
3		NbE	1.0	Regular Soundings from 20 to	
4	Came to \rightarrow with the best Bower in 16 $\frac{1}{2}$ fms. 17 fms. blue Mud.				
5	Long. $\overline{106^{\circ} 8'}$ Chronom. 106 $^{\circ} 8'$ E				
5	Rain				
9	Light Airs. NNE. Weighed				
11	Came to \rightarrow with the best Bower in 17 fms. blue Clay.				

At 4 PM at \rightarrow . Bearings,

West Island	S 40 $^{\circ}$ E
North Watcher	E 24. N
Northernmost of the Brothers	N 42. W
Southernmost of the Brothers	N 45. W

From the following Observations at 5 PM, at \rightarrow as above, I correct my Chronometer.

Long. at 5 PM $\overline{105^{\circ} 56'}$ Chron.	105 $^{\circ} 56'$
Batavia Long.	106. 51
Chronom. diff. from Batavia	0. 55
Diff. true D ^o	43
Error	12
Long. at 5 PM $\overline{105^{\circ} 56'}$ Chron.	105. 56
	12
Ships true Long.	106. 8

I take a Departure from the Bearings of P^o Baby, at 5 PM, allowing the Ships Long. as deduced from the Chronometer to be just.

At 11

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Aug. 2.

At 11 AM, at \rightarrow , Bearings as under.

West Island	S 34. E
Northernmost of the <i>Thousand Islands</i>	S 61. E
<i>North Watcher</i>	N 26. E
<i>Two Brothers</i>	W 40. N

No Observation.

Wednesday, Aug. 3.

H. Weather. Winds. Courc. K. F. Soundings.

1	Light Airs. NE	
AM, 1	Tryed the Current, found it set to the SW 1 mile.	
4	L ^s . hard Rain. SE. Weighed.	
5	. . . . . NE	1..
6	. . . . .	2.4 17 to 13 Mud
7	. . . . .	1.4
8	. . . . .	2..
9	. . . . . NNE.	3..
10	. . . . .	4..
11	. . . . .	3..
12	. . . . .	2.4
		20.

13 fms. Mud

At 8 AM, Long. $\frac{49}{2}$ Chron. corrected 106° 1' E.

The *North Watcher* East 4 miles.

At 11,

D^o SbE $\frac{1}{2}$ E, 10 miles

At Noon,

Body of D^o S 13° E, 12 miles

Light Airs and Calms with Sultry Weather.

NB. The Longitudes, which follow from 8 AM of this day, are all corrected from the Longitude of *Batavia*; having found, from Bearings of Land, the Chronometer had an error of 12 miles only since leaving England.

Thursday,

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1785.
Thursday, August 4.

H.	Weather.	Winds.	Courfe.	K. F.	Soundings.
1	Cloudy	East.	NNE	1..	
2				1..	
3	Hard rain			3..	
4				1..	
5	Came to ϕ in 13 fms.				
7	Weighed.				
8			NE.	3..	
9	Squally rain			2..	
10			N ^o	1..	Came to ϕ in 13 fms.
2		NEbE			
3	Light airs	SE.	Weighed		
4			NE.	2..	
5				3..	13 to 14 Clay
6				2..	12, 12 $\frac{1}{2}$, 12
7				3.4	12, 12 $\frac{1}{2}$
8				2.4	1 $\frac{1}{2}$ 12, 12 $\frac{1}{2}$
9			NNE	3..	D ^o D ^o
10				3..	12, 13 blue Clay
11			N ^o	3..	12, 13 D ^o
12				3..	

Dist. 37 Miles

The Current constant to SW and WSW, two Knots to one Knot.

At 8 AM, Longitude ϕ Chronometer 106° 18' E.

Latitude Observed 4° 25' South.

At 8 AM, 106° 18' }
Dep. 106. 8. } 10 Miles East.

Friday,

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1785.
Friday, Aug. 5.

H.	Weather.	Winds.	Course.	K. F.	Soundings.
1	Cloudy	ENE	N $\frac{1}{2}$ E	3.2	
2	.	.	.	3.0	12 $\frac{1}{2}$ fathoms Clay
3	.	.	N	2.0	12 $\frac{1}{2}$, 12 $\frac{1}{2}$ At $\frac{1}{2}$ past 3 PM
4	Came to \rightarrow				Long. $\frac{1}{2}$ Chron. 106° 28' E
2	Light airs	SE	Weighed	...	
3	.	.	NE	2.4	12 $\frac{1}{2}$, 13 blue Clay
4	.	.	.	2.4	
5	.	.	.	2.4	13, 12
6	.	.	.	2.4	13, 12
7	.	ESE	NEbN	2.6	13, 11 $\frac{1}{2}$
8	.	.	.	2.6	11 $\frac{1}{2}$, 11 $\frac{1}{2}$
9	.	.	.	2.4	11 $\frac{1}{2}$, 10
10	.	.	NNE	2.0	12, $\frac{1}{2}$ 10 Lon. $\frac{1}{2}$ Chron. 10 AM
11	.	.	.	3.0	106° 27' E
12	.	.	.	2.4	12, $\frac{1}{2}$ 10

Dist. 34 Miles

Longitude made from departure to 10 AM . . . 19'

Constant Current to the WSW 1k. 4f.

Latitude Observed . . . 3° 53' South

Light Winds and Cloudy throughout.

The Ship is at this day Noon, on the Spot where is laid down a *Bank* to the Southward of *Banka*, and we find our Soundings here very regular, blue mud and Clay. I have spoken to the Pilot Sr. S. Barbe relative to this *Bank*, he says he has passed many times over the spot where Mr. Dalrymple has laid it down, and found no irregularity of Soundings: he also informed me that many Ships of his Nation have been beating here, and know nothing of it.

Saturday,

* Capt. Cooper on 3d Aug. At 8 AM, was, by Chronometer corrected, in Long. 106° 1' E, then the *North Watcher* bore E 4' which places it in 106° 5' E. Capt. Cooper on 5th Aug. At 10 AM, was in Long. by Chronometer

1785.
Saturday, Aug. 6.

H.	Weather.	Winds.	Courfe.	K. F.	Soundings.
1	Cloudy	SE.	NE	2..	
2			NEbE	3..	11, 12, 13
3			NEbN	5..	13, 12, 12½
4				2..	10 to 13
5			NNE.	2..	13, 12
6			NEbN	3..	12, 11½
7				3.4	12, 10½
Came to $\phi \rightarrow$ in 10 fms. Current to the WSW 1 ^k 4 ^t					
4	Light Breeze	SE.	Weighted		
5			NE	2..	
6				1..	½11 to ½9
7				2..	D°
8				2..	10, 9
9			NE½N	4..	9, 10 fath Ground
10			NNE.	4..	10, 9, 8½, 8, 10 Long. $\frac{7}{8}$ Chron. 106° 43' E
11				4..	10, ½14, blue mud
12				4..	12 to 14

Dist. 43 Miles

Long. made from last departure to 10 AM 35.

From our departure from *Pulo Baby* we had constant Currents to the WSW from 7 PM to 6 AM.

At 6 AM,

Saw the Land from the Mast head bearing NNW
10 or 11 leagues, it makes like small Islands.

Soundings

Chronometer corrected, 106° 27' E. Course to Noon NNE 5^k. 4^t. gives 2' E, or Long. at Noon, 5th Aug. 106° 29' E, that is 24' E from *North Watcher*: The *Eastern Part* of the *Bank* in question does not, in my Chart, exceed 9' E from *North Watcher*; so that Capt. *Cooper* was not on the *Spot* where *It* is laid down: but, by his own account, 15' to the *Eastward* of *It*. The *Bank* was laid down relatively to *Luffpara*, by Capt. *Ekeberg* from his own Observations; There is however reason to believe that *Luffpara* lyes a few miles farther *Eastward*, with respect to *The Brothers*, and consequently from *North Watcher*, than the Observations in the *Resolution*, which I followed: but, although the *Portuguese* alledges, He knows nothing of it, and, at least, doubts its existence; It has been founded on by English Ships, as well as by Capt. *Ekeberg*. *D*

1785.
Aug. 6.

Soundings very regular with blue mud bottom.

When the Island of *Banka* bore from N 20° W to N 22° W
the Long. $\frac{7}{8}$ Chronometer was at 10 AM 106° 43' E.

At 11^h. 8^m. AM, took a View of *Banka*.

Peak a N 22° W

b N 20° W

Low Woody Island c E 15° N

Run to Noon 3^h. 6^f. Soundings from 12 to 14 fathoms.

At Noon,* Stat. 1. Lat. O. 3° 21' S. Long. 106° 52' E.

Extreams of *Banka* N 20° W to N 45° W

c E 5° 30' N

b N 24° 30' W

a N 26° 30' W

Middle Island N 7° E

Light winds, pleasant weather, and smooth water
throughout.

In Company the Portuguese Ship.

Sunday,

* In Log At Noon,

The Extreams of *Banka* from NNW to NW

A small Island to the Eastward E $\frac{1}{2}$ N 6' or 7'

Another small Island N 7° 30' E 3 or 4 lea^s.

(20)

H.	Weather.	Winds.	Course.	K. F.	Soundings.
1	Fair	SE.	NNE.	4.0	
2	.	.	.	5.0	13 to 19 } Sand
3	.	.	NE	5.0	20, 24 }
4	.	.	.	6.0	24, 26 }
5	.	.	NNE.	6.0	22, 17, 20, broken Gravel
6	.	.	NbE	6.0	19, 22, brown Gravel?
7	.	.	.	5.0	21, 25
8	.	.	.	2.0	came to $\phi \rightarrow$ in 22 fms. Long.
					ϕ Chronometer 106° 55' E.
10	Light-Breeze at SE.		Weighed		
11	.	.	NW	3.6	
12	.	.	NWbN	7.2	17 to 18 $\frac{1}{2}$

Long. made from last departure to 8 AM 47.

From Noon to 2 PM, run NbE $\frac{3}{4}$ E 8. Soundings 18.

19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853,

At 2 PM, Stat. 2.

c	.	.	.	.	S 63° E
<i>Saddle Island</i>	.	.	.	.	NE 6 leagues
<i>Island adjacent</i>	.	.	.	.	N 42° E
Low Land, R. Ext,	}	<i>Middle Island</i>	}	.	N 14. E
Hill c				.	N 10. E
<i>Highest Peak</i> B				.	N 8. E
L. Ext. . A				.	N 6. E
N ^o End	}		}	.	N 20. W
Center				.	N 40. W
<i>Button,</i>				.	N 56. W
appearing an <i>Island</i> but joining from Mast-head	}	<i>BANKA</i>	}	.	N 71. W
W. End				.	N 71. W

1785.
Aug. 7.

The Land forms a considerable projection, from the South Point of BANKA to the Eastward, Mr. Gaspar makes this Land, an Island; I think to the contrary, as low Land was seen to join to the high Land.

From 2 to 3 PM, run NNE, 8.

At 3 PM, Station 3,

Saddle Island	E 26° N
Billiton Island	N 37. E
Sandy Beach Island	N 28. E
Middle, or Salt Isle	N 9. E to N 11° W

Saddle Island, so called from having that appearance, there is a low Island to the NE of Saddle Island.

There seems a Passage, very large, between Middle, or Salt Island, and BANKA, but take that to windward.

Saddle Island loses that form as it draws to Eastward, and then looks moderately high and well wooded.

The Island BILLITON is to be seen from Saddle Isle.

From St. 3, to St. 4, run NNE 6.

At Stat. 4,

Saddle Island	D	S 75° E to E 5° N
Low, or flat Island,	E	E 10. N
South Island,	F	E 14. N
North Island	G	E 24. N
Distant Island	H	E 26. N
Middle Island	A	N 5. E to N 25° W
BANKA,	I	W 23. N to W 10° S

G

At

1785.
Aug. 7.

At $\frac{1}{2}$ past 4 PM, 17 fathoms gravel.
Sandy-Beach Island E 20° N
Button Island E 10° N
R. Ext. of 1st. and L. Ext. of 2d in one
An Island E
A Peak E 20° S
Another Peak SE 85° } qd Saddle Id.

At $\frac{1}{2}$ past 4, brought Two Islands, with Sandy-Beach, in one; The Islands seem to be well wooded, and form the Passage between them and Middle Island.

The Channel is very good, from 19 to 23 fathoms you pass within $1\frac{1}{2}$ mile of a small sandy-beach Island, on the Starboard hand, with a Cluster of Islands, well wooded; on the other hand, you have Middle, or Salt Island, which is a considerable extent. There seems to be a good Passage between Salt Island and BANKA: It seems to deserve the preference; it being wide, should have pursued this Track, but my Friend, the Portuguese, said it was not good.

From Station 4 to Station 5, run NbE 7°

At Station 5,

Sandy-Beach Island	. . . . .	S 32° E
Saddle Island	. . . . .	E 39° S
Button	. . . . .	E 25° S
Distant Island	. . . . .	E 15° N
Middle Island	. . . . .	N 2° W to N 43° W
BANKA	. . . . .	N 46° W to W 30° S

From

1785.
Aug. 7.

From Station 5 to Station 6 run NNE 6'.

At Station 6,

<i>Sandy-Beach Island</i>	S 1° W
<i>Button Island</i>	S 6° E
<i>Flat Island</i>	S 32° E
<i>South Island</i>	E 42° S
<i>North Island</i>	E 33° S
<i>Distant Island</i>	E 5° S
<i>BILLITON</i>	E 5° N to E 12° N

At 10 fet,

Extreams of <i>Middle Island</i>	S 60° W to N 38° W
High Land of <i>Billiton</i>	S 84° E 3 or 4 leag'
<i>Gaspar Island</i>	N 9° W

At 11 AM,

<i>Salt Island</i>	from S 5° W to S 25° W
<i>Banka</i>	S 35° W to N 75° W
<i>Gaspar Island</i>	N 11° W

From Station 6 to Stat. 7 run NbE 8'

At Station 7,

<i>BILLITON</i>	E 10° S to E 12° N
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From Station 7 to Stat. 8, run NNW 5'

At Stat. 8,

<i>Gaspar Island</i>	N 4° W
<i>Middle Island</i>	S 10° W to S 30° W
<i>BANKA</i>	S 35° W to N 75° W

At Noon,

<i>Gaspar Island</i>	N 19° E 4' or 5'
----------------------	------------------

The Portuguese nearly Hull-down aftern.

Course.

1785. Course. Dist. Latitude. Long. Account.
August 7. S 19° E.* 5 miles. 2° 34' S 2° 33' indiff. 106° 54' E

Mostly pleasant breezes with cloudy and rainy weather.

Aug. 8. My departure from *Gaspar Island*, as it bore at Noon.

From Station 8 to Stat. 9, run NNW 7'

At Stat. 9,

Gaspar Island N 24° E
A Rock N 42° W

From Station 9 to Stat. 10, run NNW 4'

At Stat. 10,

Gaspar Island E 10° N
The Rock SSW

From Station 10 to Station 11, run NbW 12'

At Station 11

Gaspar Island S 30° E
BANKA S 6° W to S 45° W

The *Rock* to the SWestward of *Gaspar Island* when seen from the Southward, appears like a *Sail*, It has a large *Tree* on the middle, and seems bold to.

Gaspar Island is moderately high, seems to be 5' in extent from SE to NW, well wooded, with many *water-falls*; saw no *Breakers*, but those on the *Rock* WNW of it.

Gaspar Island I place in Longitude from *Greenwich* by my Chronometer corrected 106° 55' E Latitude 2° 30' S.

Monday,

* *Gaspar* is said to bear N 19° E at Noon, either this should be S 19° W, or that N 19° W. *D*

ATLAS.

(25)

1785.
Monday, Aug. 8.

H.	Weather.	Winds.	Courfe.	K. F.	Soundings.
1	Rain	SW	NNW	6.4	
2			NbW $\frac{1}{2}$ W	5.0	22 to 22? Grey Sand with black
3		East		4.0	18, 17 Specks.
4				3.0	17, 17
5		SW		2.4	17 $\frac{1}{2}$, 20 D ^o
6			NNW	5.0	18, 19 D ^o
7				6.0	
8				4.4	
9				5.0	20 blue Mud
10			NbW $\frac{1}{2}$ W	4.4	18
11				5.0	19
12				5.0	19
1				5.2	20
2		SE		5.4	20, 19
3				5.6	20, 20
4				6.0	20, 19
5				6.0	17, 18
6				7.0	18, 19
7				6.0	18
8				6.0	18
9				6.0	19
10				5.4	19
11				5.0	21
12				5.0	21

Dist. 125 Miles.

Courfe.	Dist.	D. Lat.	Dep.	Latitude.	Lon. $\frac{1}{2}$ Account
				A O	from Gaspar Isle.
				S.	
N 18° W	124.	118.	38.	0° 35.	0° 33. 106° 16.

At 3 PM,

The Extrems of Banka	.	.	.	from W 34° S to W 54° S
Rock off Banka	.	.	.	S 11. E 4 or 5 leags.
Body of Gaspar Island	.	.	.	S 45. E 3 leagues

At 5 PM,

Gaspar Island	.	.	.	S 29. E 6 or 7 leags.
Extrems of Banka	.	.	.	S 6. W to S 45° W

At Sunfet, the Portuguese, Courfes down a-ftern.

Light Winds and Cloudy throughout.

I take a departure from Gaspar Island.

H

Tuesday,

1785.
Tuesday, Aug. 9.

H.	Weather.	Winds.	Cours.	K. F.	Soundings.
1, 2	Rain .	S° .	NbW.	11.0	19
3	.	.	.	5.0	20
4	.	.	.	5.0	21
5	.	.	.	5.0	24
6	.	.	.	5.2	26
7	.	.	NNW.	4.4	24
8	.	.	.	4.4	
9	.	.	.	5.0	25
10	.	.	.	5.4	
11	.	.	.	5.2	
12	.	.	.	5.4	
1	.	.	.	5.4	27
2, 3	.	.	.	10.0	
4	.	.	.	5.0	28
5	.	.	.	4.4	30
6	.	.	.	4.0	29
7	.	.	.	3.4	
8	.	.	.	4.2	30
9	.	.	.	5.0	29
10	.	.	.	4.4	
11	.	.	.	5.0	30
12	.	.	.	5.2	32
				119.0	

Long. $\frac{7}{8}$ Chron. 106° 8.

Blue Clay.

Blue Clay

Blue Clay and Shells

Cours.	Dist.	D.L.	Dep.	Latitude.	D.Long.	Long. A
				A. O.		
N 20° W	117.0	110.0	40.0	1° 17' N 1° 25' N	40.0 W	105° 36.0 E

Light Breezes, pleasant Weather, and smooth Water throughout.

Long. by Account to 8 AM

Long. made from *Gaspar Island* at 8 AM . . . 1° 26.0' W

Long. at 8 AM $\frac{7}{8}$ Chron. 105. 29. E

This, and the preceding day, saw great quantities of reddish coloured spawn, floating on the Water, in a North and South direction.

Wednesday,

1785.
Wednesday, Aug. 10.

H.	Weather	Winds	Course.	K. F.	Soundings.
1	Fair	SbE	NNW	5.2	28 White sand and black specks
2	.	.	.	5.0	
3	.	SbW	.	5.2	
4	.	.	.	6.0	26
5	.	.	.	5.0	27
6	.	.	.	5.2	
7	.	.	NbW.	4.0	28
8	.	.	.	3.4	27
9	.	.	N°	4.0	
10	.	.	NbW.	3.4	
11	.	.	.	3.4	30
12	.	.	.	4.0	31
1	.	.	.	3.0	30
2	.	.	.	4.0	30
3	.	.	.	4.0	
4	.	.	.	4.0	31
5	.	.	.	5.0	
6	.	.	NbE	4.6	No Ground 32
7	.	.	.	5.0	Long. 77° Chron. 105° 0. E
8	.	.	.	5.6	
9	.	.	.	6.2	
10	.	.	.	6.4	½ past Long. 77° Chron. 105° 12. E
11	.	.	.	6.0	
12	.	.	.	6.4	

Dist. 115 Miles

Course.	Dist.	D.Lat.	Dep.	Latitude	D.Long.	Long. A
				A. O.		
N 4° W	113.7	113.7	8.7	3° 18.7' N	3° 28.7' N	8.7 W 105° 28' E

A pleasant Monsoon and fair weather throughout

At 5 AM,

Saw a small Island bearing . . . S 47° E 6 leagues

At

1785.
Aug. 10.

At 8 AM,

Northernmost of the *Anambas* . . . East
Largest of D^o . . . S 19° E
Southernmost of D^o . . . S 61° E

At 11 AM,

The Northernmost Point of the *Anambas* . . . S 55° E 7 leagues

At Noon,

Extreams of the *Anambas* . . . S 45° E to S 33° E
Off shoar about 8 leagues

Longitude made from *Gaspar Isle*, at 8 AM. 1° 55' W

Thursday, 11.

H. Weather. Winds. Course. K. F.

1 . Fair . SbW NNE 6..
2, 12 } . . . NNE 125.4 } At 1/2 past,
1, 8 } . . . NNE 125.4 } Long. 79° Chron. 106° 2' E
9 . . . 8.4 } Long. made from *Gaspar* 0. 53. W
10, 12 . . . 22.4
163.4

A pleasant Monsoon with fair Weather and smooth Water.

Course.	Dist.	D.Lat.	Dep.	Latitude N.	D.Lon.	Longitude E.
N 31° E	160'	137'	82'	5° 45' A 14° S	82' E	106° 50' A 106° 16' Chron.

Friday, 12.

H. Weather. Winds. Course. K. F.

1, 4 Cloudy SbW NNE 28.2
5 . . . SSW . . . 6.4 At 1/2 past Lon. 79° Chron. 106° 33' E
6 6.6
7, 12, 8 97.6 At 8 Lon. 79° Chron. 107.18 E
9, 10 14.2 D^o made fr. *Gaspar* 0. 23 E
11, 12 H^d rain 13.4
166.6

A steady Monsoon with Cloudy Weather.

Course.	Dist.	D.Lat.	Dep.	Latitude N.	D.Lon.	Longitude E.
NNE 1/2 E	167'	146'	78'	7° 56' A 7° 49' S	79' E	108° 9' A 107° 32' Chron.

Saturday,

1785.
Saturday, Aug. 13.

H.	Weather.	Winds.	Course.	K. F.	
1, 4	Cloudy .	SWbS	NNE $\frac{1}{2}$ E	31..	
5	.	.	NbE $\frac{1}{2}$ E	8.5	Longitude 70° Chron. 108° of
6	.	.	.	9..	
7, 10	.	.	NbE	34..	
11	.	.	NEbN	8..	
12	.	.	NE	8..	
1	.	.	NE $\frac{1}{2}$ E	7.4	
2	L ^s . to SW	.	.	7..	
3, 9	.	.	.	19.4	
6	.	.	NE	7..	
7	.	.	NE $\frac{1}{2}$ E	6..	
8, 9	.	.	.	13.3	
10	.	.	.	7.4	P ^o Sapata NNW 5 leagues
11	.	.	.	8..	
12	.	.	.	8.4	
				183.	

At 6 PM, Hauled up NbE to pass *Middleburgh Shoal*.

Intend to steer NE after running 45', finding the Current set me 12' to the Eastward since 8 AM Yesterday.

At 8 AM,

P^o Sapata bearing NWbN 3 or 4 leagues

At Noon,

Sapata bore WbN dist. about 7 leags.

From 9 to 10 AM, took separate Bearings of *Sapata* and found its Meridian distance to be 11' West of the Ships.

I

Longitude

1785.
August 13.

Longitude from *Sapata* at Noon 20' East.

Courfe.	Dist.	D.Lat.	Dep.	Latitude	D.Long.	Lon. A.
SbE	21'	20'	4'	9° 44' N	10° 3' N	109° 4' East.

Sunday, 14.

H. Weather. Winds. Courfe. K.F.

1, 2, 3 Fair . . SW . . NE . . 24.4 At 2^h 40^m Lon. $\frac{7}{8}$ Chron. 109° 39' E

fr. 10 AM 13th Easting }
to 2^h 40^m PM. 14th } 30

At 10 AM. 13th . . 109. 9

Sapata . . 11 W

Long. of *Sapata* $\frac{7}{8}$ Chronometer 108. 58

* There is a mistake here, as the Bearings of *Sapata*, WbN about 7 leagues, gives EbS, instead of SbE, the D:Lat. will therefore be 4' and Dep. 20' and D.Long. from *Sapata* 20' as above. The Long. A of courfe erroneous. *D*

From 9 to 10 AM. took separate Bearings of *Sapata* and found its Meridian distance to be 11' West of the Ship.

Longitude